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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,165	12/04/2003	Joshua Gunnar Twait	AUS920030627US1	6786

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International Business Machines Corporation  
Intellectual Property Law Department  
Internal Zip 4054  
11400 Burnet Road  
Austin, TX 78758

EXAMINER
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CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
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2677

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/728,165

**Applicant(s)**

TWAIT, JOSHUA GUNNAR

**Examiner**

Daniel J Chung

**Art Unit**

2672

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Drawings***

The drawings are approved by the Examiner.

### ***Specification***

Please review the application and correct all informalities.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havre et al (6,466,211) in view of Rao et al (6,085,202).**

Regarding claim 1, Havre et al discloses that the claimed feature of a computer implemented user interactive method for graphically displaying the proportion of a total value of a time dependent variable contributed by each of a set of elements comprising the steps of: displaying the proportion contributed by each element as an area within an ordered set of areas [i.e. 'shade, dotted areas' in Fig 3; "areas"; 55,57 in Fig 4-6] under a line representative of the total value of time dependent variable ["reference label"; 47,

i.e. time]; (See Fig 3, Fig 5, Fig 6) enabling [i.e. “user interface”; 16] the user to interactively select one of set of areas [55,57]; (See col 6 line 21-24, col 9 line 49-54) and performing a selected operation selected from the group consisting of hiding the selected area [i.e. “the user reduce the number of themes”], displaying the selected area [“selectively display”] and [reordering the position of the selected area within ordered set responsive to user selection]. (See col 6 line 21-24, col 9 line 49-54)

Havre et al does not specifically disclose that reordering the position of the selected area, as recited in claim. However, such limitation is shown in the teaching of Rao et al. [i.e. ‘user interface with hiding and reordering manipulation’] (See Abstract line 24-29, col 6 line 15-20, col 26 line 37+) It would have been obvious to one skilled in the art to incorporate the teaching of Rao et al into the teaching of Havre et al, in order to “rearrange the graphical images to reveal additional patterns and trends in the underlying information data” (See col 6 line 15-20 in Rao), as such improvement is also advantageously desirable in the teaching of Havre et al for providing/manipulating the data visualization with an interactive methodology for effective data analyze. (See col 9 line 49-50 in Havre et al)

Regarding claim 2, Havre et al discloses that ordered set of areas under line comprising a stacked area graph formed by ordered set of areas under line. (See col 1 line 24-30, Fig 5-6)

Regarding claim 3, refer to the discussion for the claim 1 hereinabove, Havre et al discloses that the selected operation performed is hiding the selected area; and further including the step, responsive to hiding step, of reforming at least one of the remaining displayed areas so as to represent the resulting change of reformed area within ordered set of stacked areas. (See col 6 line 21-24, col 9 line 49-54; Also See Abstract line 24-29, col 6 line 15-20, col 26 line 37+ in Rao et al)

Regarding claim 4, refer to the discussion for the claim 1 hereinabove, Havre et al discloses that the selected operation performed is displaying a selected undisplayed area; and further including the step, responsive to step of displaying, of reforming at least one of the other displayed areas so as to represent the resulting change of reformed area within ordered set of stacked areas. (See col 6 line 21-24, col 9 line 49-54; Also See Abstract line 24-29, col 6 line 15-20, col 26 line 37+ in Rao et al)

Regarding claim 5, refer to the discussion for the claim 1 hereinabove, Havre et al discloses that the selected operation performed is reordering the position of the selected area within ordered set; further including the step, responsive to step of reordering the position of the selected area within ordered set, of reforming at least one of the other displayed areas so as to represent the resulting change of reformed area within reordered set of stacked areas. (See col 6 line 21-24, col 9 line 49-54; Also See Abstract line 24-29, col 6 line 15-20, col 26 line 37+ in Rao et al)

Regarding claim 6, refer to the discussion for the claim 1 hereinabove, Havre et al discloses that displaying a plurality of icons [i.e. "thematic label"; 49] each representative of one of areas whereby the user may select one of areas by selecting the icon representative of the selected area. (See Fig 3, Also See Abstract line 24-29, col 6 line 15-20, col 26 line 37+ in Rao et al)

Regarding claim 7, refer to the discussion for the claim 1 hereinabove, Havre et al discloses that displaying a plurality of icons [i.e. "thematic label"; 49] each representative of one of areas whereby the user may reorder the position of the selected area by reordering the position of the selected icon representative of the selected area. (See Fig 3, Also See Abstract line 24-29, col 6 line 15-20, col 26 line 37+ in Rao et al)

Regarding claims 8-14, claims 8-14 are similar in scope to the claims 1-7, and thus the rejections to claims 1-7 hereinabove are also applicable to claims 18-14.

Regarding claims 15-20, claims 15-20 are similar in scope to the claims 1-6, and thus the rejections to claims 1-6 hereinabove are also applicable to claims 15-20.

**Claims 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Havre et al (6,466,211) in view of Rao et al (6,085,202), and further in view of Yonts (6,590,577).**

Regarding claim 21, the combination of Havre et al and Rao et al fail to disclose that selected operation is performed by morphing the displayed stacked area graph through an animated display sequence of stacked graphs. However, such limitation is shown in the teaching of Yonts in an analogous art. [i.e. "tweening and morphing"] (See col 3 line 38-52) It would have been obvious to one skilled in the art to incorporate the teaching of Havre et al and Rao et al into the teaching of Yonts, in order to effectively provide display visualization with dynamic process, as such improvement is also advantageously desirable in the teaching Havre et al for providing data representation with improved and fancy image manipulation without complicated manner.

Regarding claims 22-23, claims 22-23 are similar in scope to the claim 21, and thus the rejection to claim 21 hereinabove is also applicable to claims 22-23.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose

telephone number is (571) 272-7657. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (571) 272-7664.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**


**(703) 872-9306 (Central fax)**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc  
June 22, 2000



MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
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